

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (canceled)
2. (previously presented) A compound according to Claim 16 in which R is a -CO₂H group.
3. (previously presented) A compound according to Claim 16 in which R^a is a hydrogen atom.
4. (previously presented) A compound according to Claim 16 in which R^a is a hydrogen atom or a hydroxyl group.
5. (previously presented) A compound according to Claim 16 in which (Alk^a)_rL¹ is a -CON(R²)- group.
6. (original) A compound according to Claim 5 in which (Alk^a)_rL¹ is a -CONH- group.
7. (previously presented) A compound according to Claim 16 in which Ar² is a 1,4-phenylene group optionally substituted with one or two atoms or groups -L²(Alk)_tL³(R⁴)_u.
8. (original) A compound according to Claim 7 in which Ar² is a 1,4-phenylene group.

9. (previously presented) A compound according to Claim 16 in which Ar^1 is a pyrimidinyl, pyridyl or phenyl group optionally substituted with one or more atoms or groups $-\text{L}^2(\text{Alk})_t\text{L}^3(\text{R}^4)_u$.
10. (previously presented) A compound according to Claim 9 in which Ar^1 is a pyridyl or phenyl group optionally substituted with one or more atoms or groups $-\text{L}^2(\text{Alk})_t\text{L}^3(\text{R}^4)_u$.
11. (original) A compound according to Claim 10 in which Ar^1 is a 3,5-dichloropyridin-4-yl group.
12. (previously presented) A compound according to Claim 16 in which R^1 is the group $-\text{NHCOR}^3$ or $-\text{NHR}^3$.
13. (previously presented) A compound according to Claim 12 in which R^3 is a pyrrolidinyl or thiazolidinyl group optionally substituted with one or more halogen atoms, C_{1-6} alkyl groups, halo C_{1-6} alkyl groups optionally substituted with one or more hydroxyl groups, hydroxyl groups, C_{1-6} alkoxy groups, halo C_{1-6} alkoxy groups, thiol groups, C_{1-6} alkylthio groups, aromatic groups, heteroaromatic groups, or $-(\text{Alk}^2)_v\text{R}^{10}$ groups, and each nitrogen atom of the pyrrolidinyl or thiazolidinyl group is optionally substituted with a group $-(\text{L}^5)_p(\text{Alk}^3)_q\text{R}^{12}$;
or R^3 is a phenyl, pyrimidinyl or 1,3,5-triazinyl group optionally substituted with one or more atoms or groups $-\text{R}^{13a}$ or $-\text{Alk}^4(\text{R}^{13a})_m$.
14. (previously presented) A compound which is:

3-{4-[(3,5-Dichloroisonicotinoyl)amino]phenyl}-3-({4-[2-hydroxyethylamino]-6-methoxy-1,3,5-triazin-2-yl}amine)propanoic acid;

3-[(3,5-Dichloroisonicotinoyl)amino]-3-{4-[(3,5-dichloroisonicotinoyl)-amino]phenyl}propanoic acid;

3-{4-[(3,5-Dichloroisonicotinoyl)amino]phenyl}-3-[(2,6-dimethoxybenzoyl)amino]propanoic acid;

3-({[(4S)-3-Acetyl-1,3-thiazolinan-4-yl]carbonyl}amino-3-{4-[(3,5-dichloroisonicotinoyl)amino]phenyl}propanoic acid;

3-{4-[(3,5-Dichloroisonicotinoyl)amino]phenyl}-3-[({(2S)-1-[(3,5-dichlorophenyl)sulphonyl]tetrahydro-1-H-pyrrol-2-yl}carbonyl)amino]propanoic acid;

(2RS,3RS)-3-{4-[(3,5-Dichloroisonicotinoyl)amino]phenyl}-3-{[[(2S)-1-[(3,5-dichlorophenyl)sulphonyl]tetrahydro-1-H-pyrrol-2-yl)carbonyl]amino}-2-hydroxypropanoic acid;

3-{4-[(3,5-Dichloroisonicotinoyl)amino]phenyl}-3-[({2-[(2,5-dimethoxyphenyl)thio]-3-pyridinyl}carbonyl)amino]propanoic acid;

and the salts, hydrates and N-oxides thereof.

15. (previously presented) A pharmaceutical composition comprising a compound according to Claim 16 together with one or more pharmaceutically acceptable carriers, excipients or diluents.

16. (previously presented) A compound of formula (1):



wherein

Ar¹ is an aromatic or C₁₋₉ heteroaromatic group containing one to four heteroatoms selected from oxygen, nitrogen, and sulfur, and is optionally substituted with one or more atoms or groups -L²(Alk)_tL³(R⁴)_u;

L² and L³, which may be the same or different, is each a covalent bond or a divalent linker atom or group selected from -O-, -S-, -C(O)-, -C(O)O-, -OC(O)-, -C(S)-, -S(O)-, -S(O)₂-, -N(R⁸)-, -CON(R⁸)-, -OC(O)N(R⁸)-, -CSN(R⁸)-, -N(R⁸)CO-, -N(R⁸)C(O)O-, -N(R⁸)CS-, -S(O)₂N(R⁸)-, -N(R⁸)S(O)₂-, -N(R⁸)CON(R⁸)-, -N(R⁸)CSN(R⁸)-, and -N(R⁸)SO₂N(R⁸)-;

R⁸ is a hydrogen atom or a C₁₋₆alkyl group optionally substituted with one or more halogen atoms, hydroxy groups, or C₁₋₆alkoxy groups;

t is zero or the integer 1;

u is an integer 1, 2 or 3;

Alk is an aliphatic or heteroaliphatic chain;

R⁴ is a hydrogen or halogen atom or a group selected from C₁₋₆alkyl, -OR⁵, -SR⁵, -NR⁵R⁶, -NO₂, -CN, -CO₂R⁵, -SO₃H, -SO₃R⁵, -SOR⁵, -SO₂R⁵, -OCO₂R⁵, -CONR⁵R⁶, -OCONR⁵R⁶, -CSNR⁵R⁶, -COR⁵, -OCOR⁵, -N(R⁵)COR⁶, -N(R⁵)CSR⁶, -SO₂N(R⁵)(R⁶), -N(R⁵)SO₂R⁶, -N(R⁵)CON(R⁶)(R⁷), -N(R⁵)CSN(R⁶)(R⁷), and -N(R⁵)SO₂N(R⁶)(R⁷); and

R⁵, R⁶, and R⁷, which may be the same or different, is each a hydrogen atom or a straight or branched C₁₋₆alkyl group optionally substituted with one or more halogen atoms, hydroxy groups, or C₁₋₆alkoxy groups;

provided that when t is zero and each of L² and L³ is a covalent bond, then u is the integer 1 and R⁴ is other than a hydrogen atom;

L¹ is a covalent bond or a linker atom or group selected from -CON(R²)-, -S(O)₂N(R²)-, -N(R²)-, and -O-;

R^2 is a hydrogen atom or a C_{1-3} alkyl group;

Ar^2 is a phenylene group optionally substituted with one or two atoms or groups $-L^2(Alk)_iL^3(R^4)_u$;

R^1 is a group selected from $-NHCOR^3$, $-NH SO_2R^3$, $-NHR^3$, $-NHC(O)OR^3$, $-NHCSR^3$, $-NHCON(R^3)(R^{3a})$, $-NH SO_2N(R^3)(R^{3a})$, and $-NHCSN(R^3)(R^{3a})$;

R^3 is an optionally substituted C_{3-10} cycloaliphatic group, an optionally substituted C_{7-10} polycycloaliphatic group, an optionally substituted C_{3-10} heterocycloaliphatic group containing one, two, three or four heteroatoms or heteroatom-containing groups selected from $-O-$, $-S-$, $-C(O)-$, $-C(O)O-$, $OC(O)-$, $-C(S)-$, $-S(O)-$, $-S(O)_2-$, $-N(R^8)-$, $-C(O)NR^8-$, $-OC(O)N(R^8)-$, $-CSN(R^8)-$, $-N(R^8)CO-$, $-N(R^8)C(O)O-$, $-N(R^8)CS-$, $-S(O)_2N(R^8)-$, $-N(R^8)S(O)_2-$, $-N(R^8)CON(R^8)-$, $-N(R^8)CSN(R^8)-$ and $-N(R^8)SO_2N(R^8)-$; an optionally substituted C_{7-10} heteropolycycloaliphatic group containing one, two, three or four heteroatoms or heteroatom-containing groups selected from $-O-$, $-S-$, $-C(O)-$, $-C(O)O-$, $OC(O)-$, $-C(S)-$, $-S(O)-$, $-S(O)_2-$, $-N(R^8)-$, $-C(O)NR^8-$, $-OC(O)N(R^8)-$, $-CSN(R^8)-$, $-N(R^8)CO-$, $-N(R^8)C(O)O-$, $-N(R^8)CS-$, $-S(O)_2N(R^8)-$, $-N(R^8)S(O)_2-$, $-N(R^8)CON(R^8)-$, $-N(R^8)CSN(R^8)-$ and $-N(R^8)SO_2N(R^8)-$; an optionally substituted aromatic group, or an optionally substituted C_{1-9} heteroaromatic group containing one, two, three or four heteroatoms selected from oxygen, nitrogen, and sulfur;

R^{3a} is a hydrogen atom, an optionally substituted C_{1-6} aliphatic group, an optionally substituted C_{1-6} heteroaliphatic group containing one, two, three or four heteroatoms or heteroatom-containing groups selected from $-O-$, $-S-$, $-C(O)-$, $-C(O)O-$, $OC(O)-$, $-C(S)-$, $-S(O)-$, $-S(O)_2-$, $-N(R^8)-$, $-C(O)NR^8-$, $-OC(O)N(R^8)-$, $-CSN(R^8)-$, $-N(R^8)CO-$, $-N(R^8)C(O)O-$, $-N(R^8)CS-$, $-S(O)_2N(R^8)-$, $-N(R^8)S(O)_2-$, $-N(R^8)CON(R^8)-$, $-N(R^8)CSN(R^8)-$ and $-N(R^8)SO_2N(R^8)-$, an optionally substituted C_{3-10} cycloaliphatic group, an optionally

substituted C₇₋₁₀ polycycloaliphatic group, an optionally substituted C₃₋₁₀ heterocycloaliphatic group containing one, two, three or four heteroatoms or heteroatom-containing groups selected from -O-, -S-, -C(O)-, -C(O)O-, OC(O)-, -C(S)-, -S(O)-, -S(O)₂-, -N(R⁸)-, -C(O)NR⁸-, -OC(O)N(R⁸)-, -CSN(R⁸)-, -N(R⁸)CO-, -N(R⁸)C(O)O-, -N(R⁸)CS-, -S(O)₂N(R⁸)-, -N(R⁸)S(O)₂-, -N(R⁸)CON(R⁸)-, -N(R⁸)CSN(R⁸)- and -N(R⁸)SO₂N(R⁸)-; an optionally substituted C₇₋₁₀ heteropolycycloaliphatic group containing one, two, three or four heteroatoms or heteroatom-containing groups selected from -O-, -S-, -C(O)-, -C(O)O-, OC(O)-, -C(S)-, -S(O)-, -S(O)₂-, -N(R⁸)-, -C(O)NR⁸-, -OC(O)N(R⁸)-, -CSN(R⁸)-, -N(R⁸)CO-, -N(R⁸)C(O)O-, -N(R⁸)CS-, -S(O)₂N(R⁸)-, -N(R⁸)S(O)₂-, -N(R⁸)CON(R⁸)-, -N(R⁸)CSN(R⁸)- and -N(R⁸)SO₂N(R⁸)-; an optionally substituted aromatic group, or an optionally substituted C₁₋₉ heteroaromatic group containing one, two, three or four heteroatoms selected from oxygen, nitrogen, and sulfur;

wherein the optional substituents for the aromatic groups and the heteroaromatic groups of R³ and R^{3a} are selected from one or more atoms or groups R¹³ wherein R¹³ is -R^{13a} or -Alk⁴(R^{13a})_m;

R^{13a} is a halogen atom, or an amino, substituted amino, nitro, cyano, amidino, hydroxyl, substituted hydroxyl, formyl, carboxyl, esterified carboxyl, thiol, substituted thiol, -COR¹⁴-, -CSR¹⁴-, -SO₃H-, -SOR¹⁴-, -SO₂R¹⁴-, -SO₂NH₂-, -SO₂NHR¹⁴-, -SO₂N(R¹⁴)₂-, -CONH₂-, -CSNH₂-, -CONHR¹⁴-, -CSNHR¹⁴-, -CON(R¹⁴)₂-, -CSN(R¹⁴)₂-, -N(R¹¹)SO₂R¹⁴-, -N(SO₂R¹⁴)₂-, -N(R¹¹)SO₂NH₂-, -N(R¹¹)SO₂NHR¹⁴-, -N(R¹¹)SO₂N(R¹⁴)₂-, -N(R¹¹)COR¹⁴-, -N(R¹¹)CONH₂-, -N(R¹¹)CONHR¹⁴-, -N(R¹¹)CON(R¹⁴)₂-, -N(R¹¹)CSNH₂-, -N(R¹¹)CSNHR¹⁴-, -N(R¹¹)CSN(R¹⁴)₂-, -N(R¹¹)CSR¹⁴-, -N(R¹¹)C(O)OR¹⁴-, -SO₂NHet¹-, -CONHet¹-, -CSNHet¹-, -N(R¹¹)SO₂NHet¹-, -N(R¹¹)CONHet¹-, -N(R¹¹)CSNHet¹-, -SO₂N(R¹¹)Het²-, -Het²-, -CON(R¹¹)Het²-, -CSN(R¹¹)Het²-, -N(R¹¹)CON(R¹¹)Het²-, -N(R¹¹)CSN(R¹¹)Het²-, aryl or heteroaryl group;

R^{14} is an $-Alk^4(R^{13a})_m$, aryl or heteroaryl group;

NHet¹ is a C₅₋₇cyclicamino group optionally containing one or more -O- or -S- atoms or -N(R¹¹)-, -C(O)- or -C(S)- groups and optionally substituted with one or more substituents as defined for the cycloaliphatic groups of R³ and R^{3a};

Het² is a monocyclic C₅₋₇carbocyclic group optionally containing one or more -O- or -S- atoms or -N(R¹¹)-, -C(O) or -C(S)- groups and optionally substituted with one or more substituents as defined for the cycloaliphatic groups of R³ and R^{3a};

Alk⁴ is a straight or branched C₁₋₆alkylene, C₂₋₆alkenylene or C₂₋₆alkynylene chain, optionally interrupted by one, two, or three -O- or -S- atoms or -S(O)_n or -N(R¹⁵)- groups;

R¹⁵ is a hydrogen atom or C₁₋₆alkyl group;

m is zero or an integer 1, 2 or 3;

n is an integer 1 or 2;

wherein the optional substituents for the aliphatic groups and the heteroaliphatic groups of R^{3a} are selected from halogen atoms, hydroxy groups, C₁₋₆alkoxy groups, thiol groups, C₁₋₆alkylthio groups, amino groups, and substituted amino groups;

wherein the optional substituents for the cycloaliphatic, polycycloaliphatic, heterocycloaliphatic and heteropolycycloaliphatic groups of R³ and R^{3a} are selected from halogen atoms, C₁₋₆alkyl groups, haloC₁₋₆alkyl groups optionally substituted with hydroxyl groups, hydroxyl groups, C₁₋₆alkoxy groups, haloC₁₋₆alkoxy groups, thiol groups, C₁₋₆alkylthio groups, aromatic groups, heteroaromatic groups, and $-(Alk^2)_vR^{10}$ groups;

Alk² is a straight or branched C₁₋₃ alkylene chain;

v is zero or an integer 1;

R^{10} is a -OH, -SH, $-N(R^{11})_2$, -CN, $-CO_2R^{11}$, $-NO_2$, $-CON(R^{11})_2$, $-CSN(R^{11})_2$, $-OC(O)N(R^{11})_2$, $-C(O)H$, $-COR^{11}$, $-OCO_2R^{11}$, $-OC(O)R^{11}$, $-C(S)R^{11}$, $-CSN(R^{11})_2$, $-N(R^{11})COR^{11}$, $-N(R^{11})CSR^{11}$, $-SO_3H$, $-SOR^{11}$, $-SO_2R^{11}$, $-SO_3R^{11}$, $-SO_2N(R^{11})_2$, $-N(R^{11})SO_2R^{11}$, $-N(R^{11})CON(R^{11})_2$, $-N(R^{11})CSN(R^{11})_2$, or $-N(R^{11})SO_2N(R^{11})_2$ group; and

R^{11} is an atom or group as defined for R^8 or an optionally substituted cycloaliphatic or heterocycloaliphatic group as defined for R^3 ;

and when R^3 is a heterocycloaliphatic group containing one or more nitrogen atoms each nitrogen atom is optionally substituted with a group $-(L^5)_p(Alk^3)_qR^{12}$;

L^5 is $-C(O)-$, $-C(O)O-$, $-C(S)-$, $-S(O)-$, $-S(O)_2-$, $-CON(R^{11})-$, $-CSN(R^{11})-$, $-SON(R^{11})-$ or $-SO_2N(R^{11})-$;

p is zero or an integer 1;

Alk^3 is an optionally substituted aliphatic or heteroaliphatic chain;

q is zero or an integer 1;

R^{12} is a hydrogen atom or an optionally substituted cycloaliphatic, heterocycloaliphatic, polycycloaliphatic, polyheterocycloaliphatic, aromatic or heteroaromatic group;

R^a and $R^{a'}$, which may be the same or different, are each independently selected from a hydrogen or halogen atom or an optionally substituted straight or branched alkyl, alkenyl, alkynyl, haloalkyl, alkoxy, haloalkoxy, alkylthio or $-(Alk^b)_mR^b$ group (in which Alk^b is a C_{1-3} alkylene chain, m is zero or the integer 1, and R^b is -OH, -SH, $-NO_2$, -CN, $-CO_2H$, $-CO_2R^c$ (where R^c is an optionally substituted straight or branched C_{1-6} alkyl group), $-SO_3H$, $-SOR^c$, $-SO_2R^c$, $-SO_3R^c$, $-OCO_2R^c$, $-C(O)H$, $-C(O)R^c$, $-OC(O)R^c$, $-C(S)R^c$, $-NR^dR^e$ (where R^d and R^e , which may be the same or different, are each a hydrogen atom or an optionally substituted straight or branched C_{1-6} alkyl group), $-CON(R^d)(R^e)$,

-OC(O)N(R^d)(R^e), -N(R^d)C(O)R^e, -CSN(R^d)(R^e), -N(R^d)C(S)R^e, -S(O)₂N(R^d)(R^e),
-N(R^d)SO₂R^e, -N(R^d)CON(R^e)(R^f) (where R^f is a hydrogen atom or an optionally substituted
straight or branched C₁₋₆ alkyl group), -N(R^d)C(S)N(R^e)(R^f) or -N(R^d)SO₂N(R^e)(R^f) group);

Alk^a is an optionally substituted C₁₋₆ aliphatic or C₁₋₆ heteroaliphatic chain
containing one, two, three or four heteroatoms or heteroatom-containing groups selected from
-O-, -S-, -C(O)-, -C(O)O-, OC(O)-, -C(S)-, -S(O)-, -S(O)₂-, -N(R⁸)-, -C(O)NR⁸-,
-OC(O)N(R⁸)-, -CSN(R⁸)-, -N(R⁸)CO-, -N(R⁸)C(O)O-, -N(R⁸)CS-, -S(O)₂N(R⁸)-,
-N(R⁸)S(O)₂-, -N(R⁸)CON(R⁸)-, -N(R⁸)CSN(R⁸)-, and -N(R⁸)SO₂N(R⁸)-;

wherein the optional substituents for the aliphatic and heteroaliphatic groups
of Alk^a are selected from halogen atoms, hydroxy groups, C₁₋₆alkoxy groups, thiol groups,
C₁₋₆alkylthio groups, amino groups, and substituted amino groups;

r is zero or the integer 1;

R is a carboxylic acid (CO₂H), a carboxylic ester group, or carboxylic amide
group;

and the salts, hydrates and N-oxides thereof.

17. (previously presented) A method for the treatment of a mammal suffering from
inflammatory arthritis, multiple sclerosis, allograft rejection, diabetes, inflammatory
dermatoses, asthma or inflammatory bowel disease, comprising administering to the mammal
a therapeutically effective amount of a compound according to Claim 16.

18. (canceled)

19. (previously presented) A method according to Claim 17 wherein said inflammatory arthritis is selected from the group consisting of rheumatoid arthritis vasculitis and polydermatomyositis.

20. (currently amended) A method according to ~~Claim 19~~ Claim 17 wherein said inflammatory dermatoses are selected from the group consisting of psoriasis and dermatitis.

21. (original) A method for inhibiting, in a mammal, the binding of $\alpha 4$ integrins to the ligands thereof, comprising administering to the mammal an effective amount of a compound according to Claim 16.

22. (original) A method according to Claim 21 wherein the $\alpha 4$ integrins are selected from the group consisting of $\alpha 4\beta 1$ and $\alpha 4\beta 7$ integrins.